

**Notice of Allowability**

Application No.

10/057,672

Applicant(s)

CLANCY ET AL.

Examiner

Art Unit

Djenane M. Bayard

2141

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/03/05.
2. ☒ The allowed claim(s) is/are 1-23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. The application has been amended as follows:

#### **Claim 1 :**

A system for dynamically modifying functionality in a configurable communications protocol stack, comprising: a system controller operable to communicate new protocol stack software to an interface device for purposes of modifying existing protocol stack software operating on the interface device; and the interface device, coupled to a plurality of telephony resources and operable to: operate a protocol stack comprising the existing protocol stack software, the [[example]] existing protocol stack software operable to process events associated with connections initiated subsequent to the existing protocol stack software being activated for new connections; receive the new protocol stack software from the system controller, the new protocol stack software operable to process events associated with connections initiated subsequent to the new protocol stack software being activated for new connections; activate the new protocol stack software for new connections, the existing protocol stack software continuing to

process all events associated with connections initiated before the new protocol stack software was activated, the new protocol stack software processing all events associated with connections initiated the new protocol stack software was activated; and remove the existing protocol stack software upon completion of all connections initiated before the new protocol stack software was activated, services provided to the telephony resources being substantially uninterrupted by the modification.

**Claim 2 :**

2. The system of claim 1, wherein the interface device comprises a stack management process and each portion of the configurable communication protocol stack that may be dynamically modified is associated with a unique functionality identification key, the stack management process operable to compare a functionality identification key of the new protocol stack software with a functionality identification key of the existing protocol stack software; if the functionality identification key of the new protocol stack software is not already active, activate the new protocol stack software for all future connections, the new protocol stack software being entirely new to the system; if the functionality identification key of the new protocol stack software is already active, activate the new protocol stack software and deactivate the existing protocol stack software, the new protocol stack software being an upgrade, replacement, or other modification of the existing protocol stack software.

**Claim 5**

5. The system of claim 1, wherein the configurable communication protocol stack is an integrated services digital network (ISDN) protocol stack and the interface device is an ISDN interface device.

**Claim 6**

6. The system of claim 1, wherein the configurable communication protocol stack comprises a local data link layer interface portion associated with a local agent and a network layer interface portion associated with a remote call agent; and functionality associated with the local data link layer interface and network layer interface portions may be independently modified.

**Claim 9**

9. The method of Claim 8, wherein the interface device comprises a stack management process and each portion of the configurable communication protocol stack that may be dynamically modified is associated with a functionality identification key, the stack management process comprising: comparing a functionality identification key of the new protocol stack software with a unique functionality identification key of the existing protocol stack software; if the functionality identification key of the new protocol stack software is not already active, activating the new protocol stack software for all future connection, the new protocol stack software being entirely new to the system; if the functionality identification key of the new protocol stack software is already active, activating the new protocol stack software and deactivating the existing

protocol stack software, the new protocol stack software being an upgrade, replacement, or other modification of the existing protocol stack software.

**Claim 12**

The method of claim 8, wherein the configurable communication protocol stack is an integrated services digital (ISDN) protocol stack and the interface device is an ISDN interface device.

**Claim 16**

16. The logic of claim 15, wherein the interface device comprises a stack management process and each portion of the configurable communication protocol stack that may be dynamically modified is associated with a functionality identification key, the stack management process operable to: compare a functionality identification key of the new protocol stack software with a unique functionality identification key of the existing protocol stack software; if the functionality identification key of the new protocol stack software is not already active, activate the new protocol stack software for all future connections, the new protocol stack software being entirely new to the system; if the functionality identification key of the new protocol stack software is already active, activate the new protocol stack software and deactivate the existing protocol stack software, the new protocol stack software being an upgrade, replacement, or other modification of the existing protocol stack software.

**Claim 19**

19. The logic of Claim 15, wherein the configurable communication protocol stack is an integrated services digital network (ISDN) protocol stack and the interface device is an ISDN interface device.

3. The following is an examiner's statement of reasons for allowance: dynamically modifying functionality in a configurable communications protocol stack includes, at an interface device, operating a protocol stack that includes existing protocol stack software operable to process events associated with connections initiated subsequent to the existing protocol stack software being activated for new connections. The method also includes communicating new protocol stack software from a system controller to the interface device, which may be connected to multiple telephony resources, for purposes of modifying the existing protocol stack software operating on the interface device. At the interface device, new protocol stack software is received from the system controller and is operable to process events associated with connections initiated subsequent to the new protocol stack software being activated for new connections. The existing protocol stack software continues to process all events associated with connections initiated before the new protocol stack software was activated, and the new protocol stack software processes all events associated with connections initiated after the new protocol stack software was activated. The existing protocol stack software, upon completion of all connections initiated before the new protocol stack software was activated, is removed, services provided to the

Art Unit: 2141

telephony resources being substantially uninterrupted by the modification

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Djenane M. Bayard whose telephone number is (571) 272-3878. The examiner can normally be reached on Monday- Friday 5:30 AM- 3:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/057,672  
Art Unit: 2141

Page 8

Djenane Bayard

Patent Examiner

  
RUPAL DHARIA  
ASSISTANT PATENT EXAMINER